CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method comprising:

receiving a first set of pixel values representing a portion of a first image frame at a first resolution, wherein the first set of pixel values represent a first pattern with a first rate of change;

generating a second set of pixel values related to the first set of pixel values to represent the first pattern with a second rate of change, wherein the second pattern is related to the first pattern and the second rate of change is less than the first; and

re-sampling the second set of pixel values to generate a portion of a second image frame, wherein the second image frame represents the first image frame at a second resolution, different from the first resolution;

wherein generating the second set of pixel values includes replicating pixel values from the first set of pixel values; and

wherein re-sampling the second set of pixel values includes generating alpha values to represent relative positions of pixels in the second image frame in relation to the pixels of the second set of pixel values.

2. (Canceled)

3. (Original) The method as in Claim 1, wherein the portion of the second image frame includes a set of image pixels representing at least a portion of a line of the first image frame.

4. (Original) The method as in Claim 1, wherein the first pattern includes a portion of text.

5. (Original) The method as in Claim 1, wherein re-sampling includes bi-linear re-sampling.

6. (Original) The method as in Claim 1, wherein the step of re-sampling includes multi-tap filtering.

7. (Original) The method as in Claim 1, wherein the second resolution is greater than the first resolution.

8. (Canceled)

9. (Previously Presented) A computer readable medium tangibly embodying a program of instructions, said program of instructions comprising instructions to:

receive a first set of pixel values representing a portion of a first image frame at a first resolution, wherein the first set of pixel values represent a first pattern with a first rate of change;

generating a second set of pixel values related to the first set of pixel values to represent the first pattern with a second rate of change, wherein the second pattern is related to the first pattern and the second rate of change is less than the first; and

re-sampling the second set of pixel values to generate a portion of a second image frame, wherein the second image frame represents the first image frame at a second resolution;

wherein generating the second set of pixel values includes replicating pixel values from the first set of pixel values; and

wherein re-sampling the second set of pixel values includes generating alpha values to represent relative positions of pixels in the second image frame in relation to the pixels of the second set of pixel values.

10. (Canceled)

11. (Original) The method as in Claim 9, wherein the portion of the second image frame includes a set of image pixels representing at least a portion of a line of the first image frame.

12. (Original) The method as in Claim 9, wherein the first pattern includes a portion of text.

13. (Original) The method as in Claim 9, wherein re-sampling includes bi-linear re-sampling.

14. (Previously Presented) The method as in Claim 9, wherein re-sampling includes multi-tap filtering.

15. (Original) The method as in Claim 9, wherein the second resolution is greater than the first resolution.

16. (Canceled)

17. (Previously Presented) A system comprising:

a first input to receive a first set of pixel values of a first image frame at a first resolution, wherein the first set of pixel values represent a first pattern with a first rate of change;

a replication unit to replicate pixel values from the first set of pixel values to generate a second set of pixel values, wherein the second set of pixel values represent the first pattern with a second rate of change, less than the first rate of change; and

a re-sampler to re-sample the second set of pixel values to generate a portion of a second image frame based on alpha values representative of relative positions of pixels in the second image frame in relation to the pixels of the second set of pixels, wherein the second image frame represents the first image frame at a second resolution.

18. (Original) The system as in Claim 17, wherein said replication unit performs replicates pixel values according to an integer scale value.

19. (Original) The system as in Claim 17, wherein said first input includes a set of latches to store said first set of pixel values.

20. (Original) The system as in Claim 17, wherein said re-sampler includes a multi-tap filter to interpolate said second image frame from said second set of pixel values.

21. (Canceled)

22. (Original) The system as in Claim 17, wherein said second resolution is greater than said first resolution.

23. (Original) The system as in Claim 17, further including a pixelated display to display the second image frame, wherein a display resolution associated with the pixelated display is equivalent to the second resolution.

24. (Currently Amended) A method comprising:

receiving an absolute alpha value, wherein the absolute alpha value represents a position, within a first range of alpha values, relative to a first source pixel;

amplifying the absolute alpha value by a factor to generate an amplified alpha value; and

normalizing the amplified alpha value to generate a normalized alpha value so that the normalized alpha value represents a position of a re-sampled pixel relative to the first range of alpha values.

25. (Previously Presented) The method as in Claim 24, further including:

subtracting a first value from the absolute alpha value before the step of amplifying the alpha value by a factor, wherein negative values of the alpha value, after subtracting the first value, indicate closer proximity of the re-sampled pixel to the first source pixel than a second source pixel; and

further wherein normalizing the amplified alpha values includes:

clipping the amplified alpha value within a subset of alpha values to generate a clipped alpha value, wherein amplified alpha values outside of the subset of alpha values are set to a nearest limit of the subset of alpha values; and

adding the first value to the clipped alpha value to generate the normalized alpha value.

26. (Original) The method as in Claim 25, wherein the first value is approximately 0.5.

27. (Original) The method as in Claim 26, wherein the subset of alpha values include the range of alpha values from –0.5 to approximately +0.5.

28. (Previously Presented) The method as in Claim 24, further including applying a first representation of the modified alpha value to a value associated with the first source pixel and applying a second representation of the modified alpha value to a value associated with a second source pixel to generate a value for the re-sampled pixel.

29. (Original) The method as in Claim 28, wherein the second representation of the modified alpha value is the modified alpha value and the first representation of the modified alpha value is the difference between one and the modified alpha value.

30. (Original) The method as in Claim 28, wherein applying includes multiplying.

31. (Original) The method as in Claim 24, wherein steps in position away from the first source pixel are measured by values equivalent to an inverse of a scale ratio to be performed in generating the re-sampled pixel.

32. (Original) The method as in Claim 24, wherein the first range includes a range of alpha values from zero to one.

33. (Currently Amended) The method as in Claim [[24]] 25, wherein the first source pixel is the nearest left pixel to the relative position of the re-sampled pixel and the second source pixel is the nearest right pixel to the relative position of the re-sampled pixel.

34. (Previously Presented) The method as in Claim 24, wherein the method is performed using a multi-tap filter.

35. (Original) The method as in Claim 34, wherein the multi-tap filter further includes a two-tap filter.

36. (Original) The method as in Claim 24, wherein the first source pixel includes an image pixel and the normalized alpha value is used to generate a scaled image pixel associated with the first source pixel.

37. (Previously Presented) The method as in Claim 24, wherein the method is performed as part of operations within an image scalar.

38. (Original) A system comprising:

a first latch to store a first pixel value, said first latch including:

an input coupled to an output of a pixel source to receive said first pixel value from a first set of pixel values;

an output coupled to:

an input of a second latch; and

a first input of a first multiplier;

said second latch to store a second pixel value, said second latch including:

an input to receive said second pixel value from said first latch;

an output coupled to a first input of a second multiplier;

said first multiplier to multiply said first pixel value by a first modified alpha coefficient and generate a first product, said first multiplier including:

said first input coupled to said output of said first latch;

a second input coupled to a first output of an alpha modifier to receive said first modified alpha coefficient;

an output coupled to a first input of an adder;

said second multiplier to multiply said second pixel value by a second modified alpha coefficient to generate a second product, said second multiplier including:

said first input coupled to said output of said second port;

a second input coupled to a second output of said alpha modifier to receive said second modified alpha coefficient;

an output coupled to a second input of said adder;

an alpha coefficient modifier to limit absolute alpha coefficients proximate to an edge of a range associated with the absolute alpha coefficients to the edge, said absolute

alpha coefficients proximate to an edge to be used in said first multiplier and said second multiplier to represent replications of pixels from said pixel source;

a pixel source to provide said first set of pixel values of a first image frame, wherein said set of pixel values represent a pattern at a first resolution;

an accumulator to generate said absolute alpha coefficients, wherein said alpha coefficients are representative of a relative distance between an interpolated pixel and a first pixel associated with said first pixel value; and

said adder to combine said first product and said second product to generate an interpolated pixel value, said adder including;

said first input to receive said first product;

said second input to receive said second product; and

an output to provide said interpolated pixel value, wherein said interpolated value represents a pixel value of second set of pixel values, wherein said second set of pixel values represent said pattern at a second resolution.

39. (Original) The system as in Claim 38,wherien said second resolution is greater than 1.5 times the resolution of said first resolution.

40. (Original) The system as in Claim 38, further including a pixelated display to display pixels associated with said second set of pixel values.

41. (Original) A method comprising:

receiving an absolute blend value, between zero and one, associated with a relative distance between a first pixel and a second pixel;

subtracting 0.5 from the absolute blend value to generate a shifted blend value;

multiplying the shifted blend value by a factor to generate an expanded value;

clipping the expanded value between –0.5 to +0.5 to generate a fixed value;

adding 0.5 to the fixed value to generate a modified blend value;

applying the modified blend value to the value of the first pixel to generate a first portion of a Previously Presented pixel value;

applying a difference between one and the modified blend value to the second pixel to generate a second portion of the Previously Presented pixel value; and

combining the first portion of the Previously Presented pixel value and the second portion of the pixel value to generate the Previously Presented pixel.

42. (Original) The method as in Claim 41, wherein the absolute blend value is closer to zero than one to indicate closer proximity to the left pixel than the right pixel.